

CLAIMS

1. A rotary nozzle brick body having a single nozzle hole, comprising:

first circular portions having a radius of $C+(D/2)+A$ formed on both sides of a center X of the brick body;

second circular portions having a radius of $C+(D/2)+B$ formed around the center Y of a nozzle hole located on a substantial center line between the two first circular portions and being formed perpendicularly to the direction of the first circular portions, in a range of $\theta = 40 \pm 10^\circ$ in terms of the central angle of the brick; and

third circular portions having a radius of $(D/2)+B$ and being formed around an intersections Z obtained by connecting a circular line drawn with a radius C around the center X of the brick body with lines drawn from the center X to both end points of the second circular portions,

where A is a safety margin at the time of a 90° full-closed state of the nozzle hole in the brick body, B is a safety margin at the time of a full-opened state of the nozzle hole in the brick body, C is a distance between the center X of the brick body and

the center Y of the nozzle hole, D is the diameter of the nozzle hole in the brick body, and $C > 4D/\pi$,

wherein the second circular portion and the third circular portion are connected smoothly,

the first circular portions and the third circular portions are connected with tangent lines in terms of the plan view contour and

the plan view contour is substantially symmetrical with respect to the center X, where $B > A$.

2. The rotary nozzle brick body according to claim 1 wherein another nozzle hole is formed at a symmetrical point with respect to the center X in addition to the nozzle hole.

3. The rotary nozzle brick body according to claim 1 or 2 wherein A is set to 30 ± 15 mm and B is set to 60 ± 15 mm.